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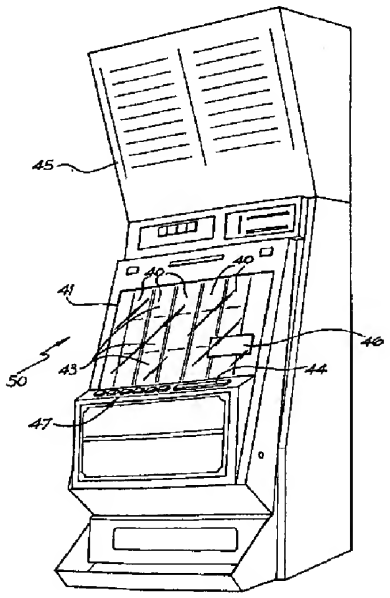
(54) Title: SLOT MACHINE WITH BACKGROUND GAME

(57) Abstract

A gaming machine is provided, which is arranged to simultaneously play two games wherein, an auxiliary window (46) is provided within the display image area of the main or foreground game. This window is used to display the current status of an auxiliary game provided on the machine and capable of simultaneous operation. The background game may be provided by the slot machine game as a stand alone function with no dependence upon supporting communications network, the background game may be linked game in which a plurality of network connected machines (50) participate with control of the game being provided by a central game controller (60), while the communications network (62) is controlled by a network controller (61).



Slot machine with background game

Background of the Invention

The present invention relates to gaming machines of the type generally referred to as slot machines, fruit machines, or poker machines, and in particular the invention provides a game to be played on such a machine.

Description of the prior art

Players who regularly play gaming machines, quickly tire of particular games and it is therefore necessary for manufacturers of gaming machines to come up with either innovative game features that add interest to the games provided on such machines, or provide new games in order to keep the players amused and willing to continue playing gaming machines.

Recently, the gaming machine market has experienced considerable growth and there is intense competition between manufacturers of gaming machines to supply the various existing and new venues. Clearly the revenue raised by an operator of a particular venue depends on the amount of money wagered. The amount of money wagered on a particular machine is related to the popularity of the machine. Thus when selecting a supplier of gaming machines, the operator of venue often pays close attention to the popularity of the various games with their patrons.

Therefore, gaming machine manufacturers are keen to devise games which are popular with players, as a mechanism for improving sales.

In particular, manufacturers regularly devise new games or game features which have not previously been seen on slot machines, in order to stimulate renewal of player interest.

The two most popular types of gaming machine either offer card games, particularly poker and variations of that game, or are machines of the traditional, and somewhat confusingly named, poker machine style (also known as fruit machines) in which the display means comprises a set of rotatable reels, each carrying a plurality of symbols, or a video simulation thereof.

However, even with the best efforts of game designers introducing features such as multi line plays, wild cards, and other similar features designed to stimulate player interest, the basic games have remained essentially the same. Gaming manufacturers have been unable to devise a

new game which has achieved the same level of success and player interest as card machines and poker machines.

One game which is popular in clubs, and is gaining popularity on gaming machines is keno. In keno, a player picks a selection of numbers ranging from 1 to 80. A series of numbers is then drawn at random from the set 1 to 80. The player wins or loses depending on how many of the numbers the player selected, match those which have been drawn at random.

One popular version of the game, known as "Club Keno" can be simultaneously played at a large number of venues in Australia. The venues include various clubs and hotels and are linked to a central system controlling the game by satellite or other suitable communication means. One game of keno is played every 15 minutes. Each player marks off their chosen numbers on a game card. The player then passes that game card and their stake money to a cashier at the venue, who processes their game card, enters the player for the next draw of keno and gives them a ticket showing the number of the game to be played and the numbers the player has chosen. One or more television screens in the venue shows an image of a board having the available numbers in the game, ie. 1 to 80. The game commences and a series of numbers are drawn at random from the set 1 to 80. The television screen indicates which numbers have been drawn at random by displaying a ball showing the drawn number growing and apparently shooting outwards from the centre of the screen. The ball is then displayed at one side of the board and the particular square on the board which shows that particular number changes colour.

Keno and other bingo and lotto type games are particularly popular, because players choose their own numbers for each game, and therefore have more input into the game and consequently believe they can influence the outcome of the game if they choose the numbers correctly. However, whilst keno type games are perfectly satisfactorily as a diversion or side show in a hotel or club, those games are much too slow for use as a game for a gaming machine, and they supply insufficient excitement to persuade a person to play the game on a stand alone gaming machine. Further, because the game is slow, it does not achieve a sufficiently high turnover for use on a gaming machine.

Other popular games are also available, such as double up feature games and other similar feature games, which are generally played as stand alone games.

Summary of the Invention

The present invention provides a gaming console having a display means, player input means and control means arranged to control images displayed on the display means in response to player inputs and game outcomes of games run on the console by the player, the console being characterised in that it is arranged to simultaneously play at least two games, including a first main game and a second auxiliary game, wherein after a player initiates an auxiliary game, the console commences playing of the auxiliary game and at least a significant portion of returns the display is returned to displaying to the main game image whereby the player may continue to play the main game the auxiliary game being a side bet game in which the player optionally places a side bet on an occurrence of a particular random outcome, eligibility of the player to play the auxiliary game being determined as a function of the wager placed on the corresponding main game.

In the preferred embodiment, the main game will be a card game or spinning reel game with or without additional feature games, but may also be a keno or bingo game.

The side bet of the auxiliary game may be placed on a rapid game having a similar period to the main game for a slower type such as keno or bingo, where a set of numbers are selected and a period elapses while the machine of a linked system responds with a game outcome.

In the preferred embodiment, the auxiliary game is a side bet game in which the player optionally places a side bet on a random outcome related or unrelated to a property of the primary game. In the preferred embodiment, the side bet game is a standalone game and is independent of any linked machines, however, the console may also be linked to a communications network along with other consoles whereby a plurality of consoles may simultaneously participate in the same auxiliary game. In such an embodiment the auxiliary game will be run on a linked game controller and the results broadcast over the network to each participating console.

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In one embodiment of the invention, the status of the auxiliary game is displayed in a display window on the display means while the player is playing the main game.

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In the preferred embodiment of a side bet game, the side bet may only be made after the player has committed to play a main game (eg, established a wager). The side bet game may be an independent red/black double up (ie, double or nothing) style of game or a similar type of game such as "pick the suit" (x 4 or nothing). Alternatively, the side bet may be related to particular outcomes on the main game, such as gambling on outcomes being over a certain level or containing certain indicia. The side bet may also be related to a system event in a linked system.

In the case of an auxiliary keno game, the player may be permitted to play more than one game of keno at a time.

In multi-game embodiments, the player may make one selection and participate in different number or indicia draws or alternatively, the player may make several sets of selections and participate in a single draw depending upon the system implemented.

Thus, in one embodiment, the present invention provides an auxiliary bingo type game in which, in one form, a player need only make one selection of indicia, such as numbers, but which, by playing a number of games in parallel and selecting different, potentially matching, numbers at random for each game, and displaying all the games on screen creates a game with increased player interest.

In a typical embodiment of an auxiliary keno game, the indicia are numbers.

In a preferred embodiment of an auxiliary keno game, the predetermined display areas on the screen which are arranged to display the numbers generated by the game control means, are a series of columns, arranged side by side. As each separate game proceeds, the display is arranged to show the series of potentially matching numbers for each game drop into the column associated with that particular game to be retained for display purposes in that column if that number corresponds to one of the numbers chosen by the player. If the number does not match the chosen numbers it is caused to disappear from the column.

In a preferred embodiment of an auxiliary keno game, one of the two columns either side of the series of columns displays the numbers chosen by the player. The other of the two columns may display the prizes awarded for each quantity of matching machines.

Typically in an auxiliary keno game, all the selected numbers are displayed as a representation of a numbered balls.

In a preferred embodiment of the auxiliary keno game, the game includes a wild ball feature in which a ball drops into the first game column adopts a value which equates with one of the numbers chosen by the player, registers in the first column, and then transfers to the next adjacent column leaving a duplicate of itself in the first column, and continues the process transferring from the, second column to the third, the third to the fourth, etc. If the wild ball lands in a column and that column already has received and retained a ball having the number adopted by the wild ball, the wild ball may change to a different one of the players preselected numbers which is not already present in that column, before transferring to the next column.

Brief Description of the Drawings

An embodiment of the invention will now be described by way of example with reference to the accompanying drawing in which:

Figure 1 illustrates a conventional video slot machine on which the embodiment of the present invention is provided;

Figure 2 illustrates a ball selection screen of a background keno game according to one embodiment of the invention;

Figure 3 illustrates a game progress screen of the background keno game of Figure 2;

Figure 4 schematically illustrates a network of gaming machines;

Figure 5 is a block diagram of a slot machine embodying the invention; and

Figure 6 illustrates a main game screen with a side bet window according to a preferred embodiment of the invention.

Detailed Description of the Preferred Embodiment

In the following detailed description the methodology of the embodiments will be described, and it is to be understood that it is within the capabilities of the non-inventive worker in the art to introduce the methodology on any standard microprocessor-based gaming machine by means of appropriate programming.

Referring to Figure 1 of the drawings, a first embodiment of the invention is illustrated in which a slot machine 50 of the type having a video display illustrating a plurality of rotatable simulated reels 40 carrying

symbols 43 is arranged to pay a prize on the occurrence of a predetermined symbol or combination of symbols.

The prize paying combinations can be any of the combinations found on known spinning reel style slot machines, or may be a new set of combinations derived specifically for machines according to the invention.

In the slot machine 50 illustrated in Figure 1, the game is initiated by pressing a button 44, however, it will be recognised by persons skilled in the art that this operating mechanism might be replaced by a pull handle actuator in other embodiments of the invention.

The top box 45 on top of the slot machine 50 displays the various winning combinations for which a prize is paid on this machine.

In the embodiment of Figure 1 a series of function switches 47 are also provided for selection of the lines to be included in the game.

Games provided in embodiments of the present invention are modified versions of the current genre of Multiline 5 Reel Video games. These games operate on a video screen 41 displaying 5 separate reels 40. Referring specifically to the embodiment of Figure 1, three symbols 43 from each of the video reel strips are viewed on screen at any one time, for each of the 5 reels. The players have an option of playing 1, 3, 5, 7 or 9 different lines.

While the slot machine illustrated in Figure 1 is of the simulated-spinning reel type, the present invention is equally applicable to any type of game found on the current generation of video slot machines and could also be applied to physical reel machines with provision of a suitable auxiliary display device. The primary game of the slot machine will operate in the conventional manner and its operation will not be described in detail.

As illustrated in Figure 1, however, an auxiliary window 46 is provided within the display image area of the main or foreground game. This window is used to display the current status of an auxiliary or background game provided on the machine and capable of simultaneous operation. This background game might be provided by the slot machine game as a stand alone function with no dependence upon a supporting communications network, or the background game may be a linked game in which a plurality of network connected machines 50 participate with control of the game being provided by a central game controller 60, while the communications network 62 is controlled by a network controller 61.

Referring to Figure 6, a typical screen for a preferred stand alone embodiment of the invention is illustrated in which a simple "double up" side bet game is provided. The side bet game is displayed in a window 46, located to the right of the pseudo-reel display 41 of the main game. Optionally, the window 46 may be resized to a full screen display between plays of the main game by operating a toggle switch 76 on the player control panel 47. A credit button 74 is used to increment the credits bet display 72 with the amount of the wager selected by the player while a clear bet button 77 is provided to zero the bet if the player makes a mistake or changes his/her mind. The player selects the desired colour on which to bet by toggling the colour bet indicator 73 using the RED/BLACK toggle button 75. While the player is selecting his bet, the card display 71 shows a card face down, and at a predetermined time during the main game an animation of the card turning over is displayed and the front face of the card is revealed. Winning bets may be accompanied by suitable music and animations to indicate the win to the player and these may be run before or after similar outputs indicating wins on the main game. In this embodiment, credits wagered on the side bet are deducted from a common credit meter 78 and wins are displayed on a common win meter 19, both shared with the main game, however, in other embodiments separate meters can be provided for each game with appropriate separate credit entry and payout means.

The stand alone side bet game illustrated in Figure 6, may be played on a stand alone machine or a networked machine that is also participating in networked linked jackpot systems and is monitored by a networked game management systems.

In the embodiment of Figures 2 to 5, a further arrangement is shown in which, the network game controller runs a keno game although other game styles are also applicable to the invention. Referring to Figure 1, the player is provided with a background game window 46 on the game display 41 of the foreground game. After each occurrence of the foreground game is completed, the player is given an opportunity of commencing participation in a background game, and in the event that the player chooses to participate, a keno number selection screen resizes itself to fullsize over the foreground screen.

Referring to Figure 2, in the particular game shown, the player has selected 6 numbers and these are shown as balls in a column 12 on the left

hand side of the screen. Once a player inputs the chosen numbers into the gaming machine by pressing appropriate selection buttons 47.

Referring to Figure 3, the next screen of the keno game shows a display having twelve columns numbered 12 to 23 respectively. The far left hand column 12 again displays the numbers chosen by the player. The far right hand column displays the prizes awarded for a given number of matches. In the particular embodiment of the game shown, a player may pick between 3 and 10 numbers from a group of 80 numbers being 1 through 80.

As the games progress, balls are shown dropping into each column in sequence. The balls are retained in a particular column if they correspond to any of the selected numbers in column 12. Up to ten balls in total, drop into each column, unless the player is awarded one or more extra balls.

Once the player has made his selections, he may continue to watch the progress of the keno game in his foreground display (Figure 3) but if he chooses to go back to the foreground game (eg; the spinning reel game), the keno display will reduce to the window 46 of the foreground game display (refer Figure 1) such that the keno game may still be monitored while the player continues to play the foreground game.

In the described embodiment each separate background game, played in parallel, has its own starting group comprising numbers 1 to 80. The games are independent, so that the numbers selected for one game do not influence the numbers selected for another. Numbers may drop into the columns simultaneously, ie. one number drops into each column at the same time or the numbers may drop in sequence, one column after another although the sequence is desirably fast to retain player interest.

The game includes a wild ball feature in which a ball drops into the first game column 14, adopts a value which equates with one of the numbers chosen by the player registers in the first column and then transfers to the next adjacent column 14 leaving a duplicate of itself in the first column and continues the process transferring from the second column 14 to the third 15, the third 15 to the fourth 16 etc. If the wild ball lands in a column and that column already has received and retained a ball having the number adopted by the wild ball, the wild ball may change to a different one of the players preselected numbers which is not already present in that column before transferring to the next column. The wild ball may of course first

appear in a column other than the first column, say the third column 15, in which case it will just travel to columns 15 through 22.

The player wins or loses depending on the number of matches made in each game ie. the number of balls retained in a column corresponding to the numbers picked by the player.

Thus, for example, game 4 shown in column 16 had no matches, so the player wins nothing for that game;

column 18, game 6, had one hit which again wins nothing; column 14, game 2 had 5 hits which wins 5 credits;

column 20, game 8 had 6 hits which wins the player 12 credits; and game 3 had 9 hits which corresponds to a win of 90 credits.

Clearly the manner of awarding prizes to a player, depending on the number of hits, is calculated so that on average, a game will provide an appropriate rate of return as required by the regulations to the player, and also provide a profit to the gaming machine operator.

The player may choose how many parallel games they wish to play, and pays for each game with credits. The player also pays for each number selected.

The program to implement the foreground and background games described above, runs on a standard gaming machine control processor 31 as illustrated schematically in Figure 5. This processor forms part of a controller 30 which drives the display screen 11 and receives player input signals from pushbutton switches 47. Alternatively, player inputs may be made by way of touch input signals from touch sensors 32 The machine also receives coin input pulses from a coin chute mechanism 33 to establish a player credit and includes a coin payout mechanism 34 connection to the communications network 42 via a network interface 35.

The operation of the background game is split between the slot machine 50 and the network game controller 60 with player control functions and number selection being provided within the slot machine 50 and random number selection performed on the central game controller and the results passed to each participating machine 50 via the network 62.

Thus, the described embodiment of the present invention enables a player to play a number of keno or bingo type games simultaneously but in which the player only has to make one selection of a series of numbers and in which a large number of games can be played in parallel, at the same

time, with each game being different because different numbers are being dropped into each game column. Thus the game can be made much more exciting and faster moving than a single game of keno and each parallel will typically have a different result.

It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

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CLAIMS:

1. A gaming console having a display means, player input means and control means arranged to control images displayed on the display means in response to player inputs and game outcomes of games run on the console by the player, the console being characterised in that it is arranged to simultaneously play at least two games, including a first main game and a second auxiliary game, wherein after a player initiates an auxiliary game, the console commences play of the auxiliary game and at least a significant portion of the display is returned to displaying the main game image whereby the player may continue to play the main game the auxiliary game being a side bet game in which the player optionally places a side bet on an occurrence of a particular random outcome, eligibility of the player to play the auxiliary game being determined as a function of the wager placed on the corresponding main game.

2. The gaming console of claim 1, wherein the main game is a card game.

3. The gaming console of claim 1, wherein the main game is a spinning reel or pseudo-spinning reel game.

4. The gaming console of claim 1, wherein the main game is a keno or bingo game.

5. The gaming console as claimed in any one of claims 1 to 4, wherein the auxiliary game has a period or duration corresponding to the period or duration of the main game.

6. The gaming console as claimed in any one of claims 1 to 6, wherein the side bet game is a simple selection game in which the game involves the player selecting one of *n* optional states, where n is an integer, the game randomly selects one of the n states and if the player and game selections coincide, the player is returned n times his wager.

7. The gaming console of claim 6, wherein n=2 and the player picks between a red and black suit.

8. The gaming console of claim 6, wherein n=2 and the player picks between an odd or even number.

9. The gaming console as claimed in any one of claims 1 to 4, wherein the auxiliary game is a slower game than the main game.

10. The gaming console of claim 9, wherein a plurality of games of the main game are played during each game of the auxiliary game.

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11. The gaming console as claimed in any one of claims 1 to 3, or claims 9 or 10, wherein the auxiliary game is based on a bingo or keno game.

12. The gaming console as claimed in any one of claims 1 to 4 of claims 10 to 12, wherein the auxiliary game is a linked game participating in a progressive jackpot.

13. The gaming console as claimed in any one of the preceding claims, wherein the main game occupies all or substantially all of an image area of the display means when the player is actively playing the main game.

14. The gaming console as claimed on any one of the preceding claims, wherein the auxiliary game occupies a window comprising less than half of an image area of the display means, at least while the main game is active.

15. The gaming console of claim 14, wherein the auxiliary game takes over control of all or substantially all of the display area of the display means during periods when the player is initiating an auxiliary game, observing an outcome of the auxiliary game or, modifying bet patterns.

16. The game console as claimed in any one of the preceding claims, wherein the player must play a main game to be eligible to participate in the auxiliary game.

17. The gaming console as claimed in any one of the preceding claims, wherein the player is provided with an option to play more than one auxiliary game simultaneously.

18. The gaming console of claim 14, wherein the auxiliary game is keno.

19. The gaming console of claim 18, wherein multiple games are played by allowing the player to make one selection and to participate in multiple draws of indicia.

20. The gaming console of claim 19, wherein multiple games are played by allowing the player to make a plurality of selections and to participate in one drawer of indicia.

21. The gaming console as claimed in any one of claims 18 to 20, wherein the indicia in the auxiliary game are numbers.

22. The gaming console of claim 21, wherein predetermined display areas on the screen which during an auxiliary game, are arranged to display the numbers generated by the game control means, are a series of columns, arranged side by side.

23. The gaming console of claim 22, wherein, as each separate game proceeds, the display is arranged to show the series of potentially matching

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numbers for each game are displayed in the column associated with that particular game to be retained for display purposes in that column if that number corresponds to one of the numbers chosen by the player.

24. The gaming console as claimed in claim 23 wherein, if the number does not match the chosen numbers, it is caused to disappear from the column.

25. The gaming console as claimed in any one of claims 23 or 24, wherein one of the two columns either side of the series of columns displays the numbers chosen by the player.

26. The gaming console of claim 25, wherein the other of the two columns may display the prizes awarded for each quantity of matching numbers.

27. The gaming console as claimed in any one of claims 21 to 26, wherein, each of the selected numbers is displayed as a representation of a numbered ball.

28. The gaming console as claimed in any one of claims 18 to 27, wherein the game includes a wild feature in which a wild indicia is displayed in the first game column and adopts a value which equates with one of the numbers chosen by the player, registers in the first column, and then transfers to the next adjacent column leaving a duplicate of itself in the first column, and continues the process transferring from one column to the next until it has occupied every game column.

29. The gaming console of claim 28, wherein, if the wild indicia lands in a column and that column already has received and retained an indicia having the number adopted by the wild indicia, the wild indicia may change to a different one of the player's preselected numbers which is not already present in that column, before transferring to the next column.

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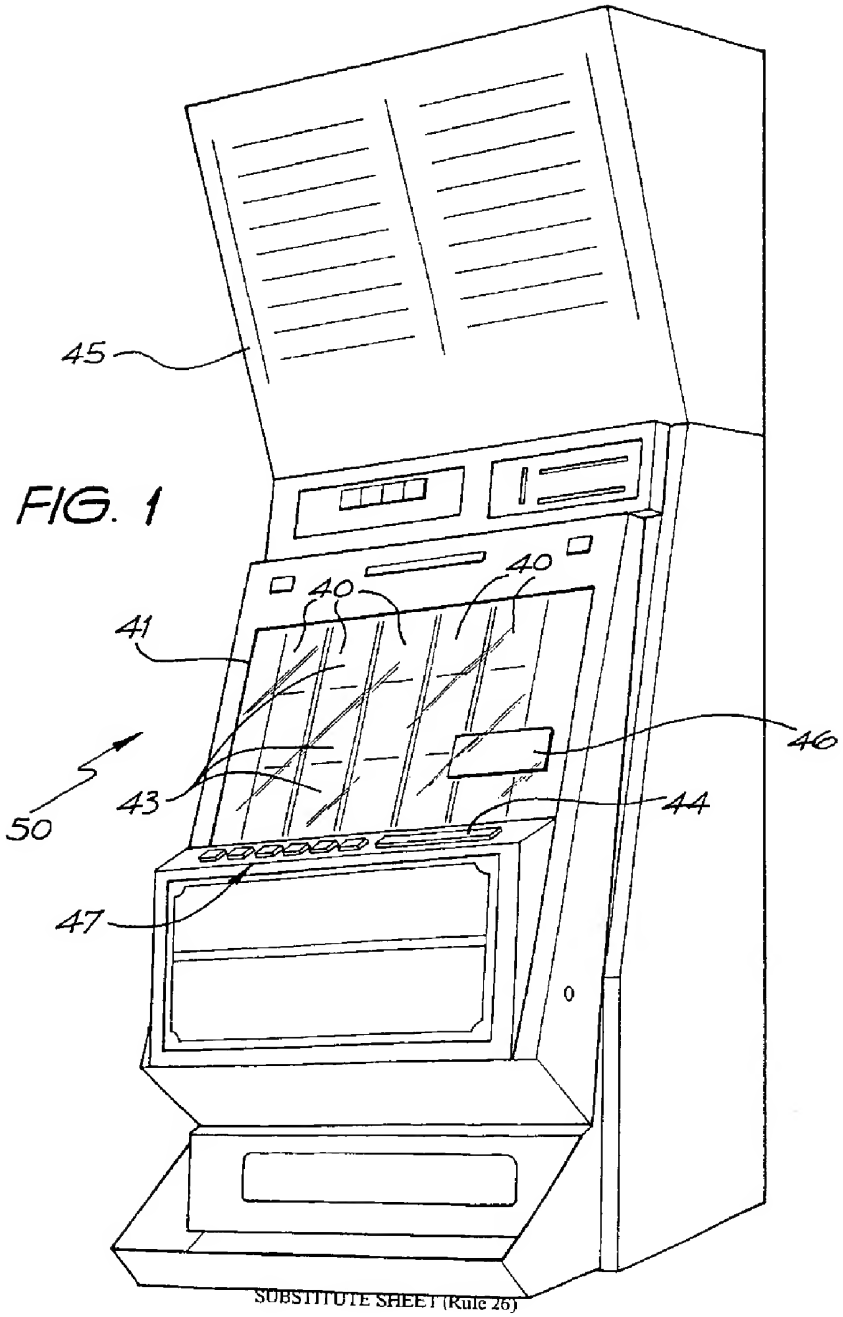
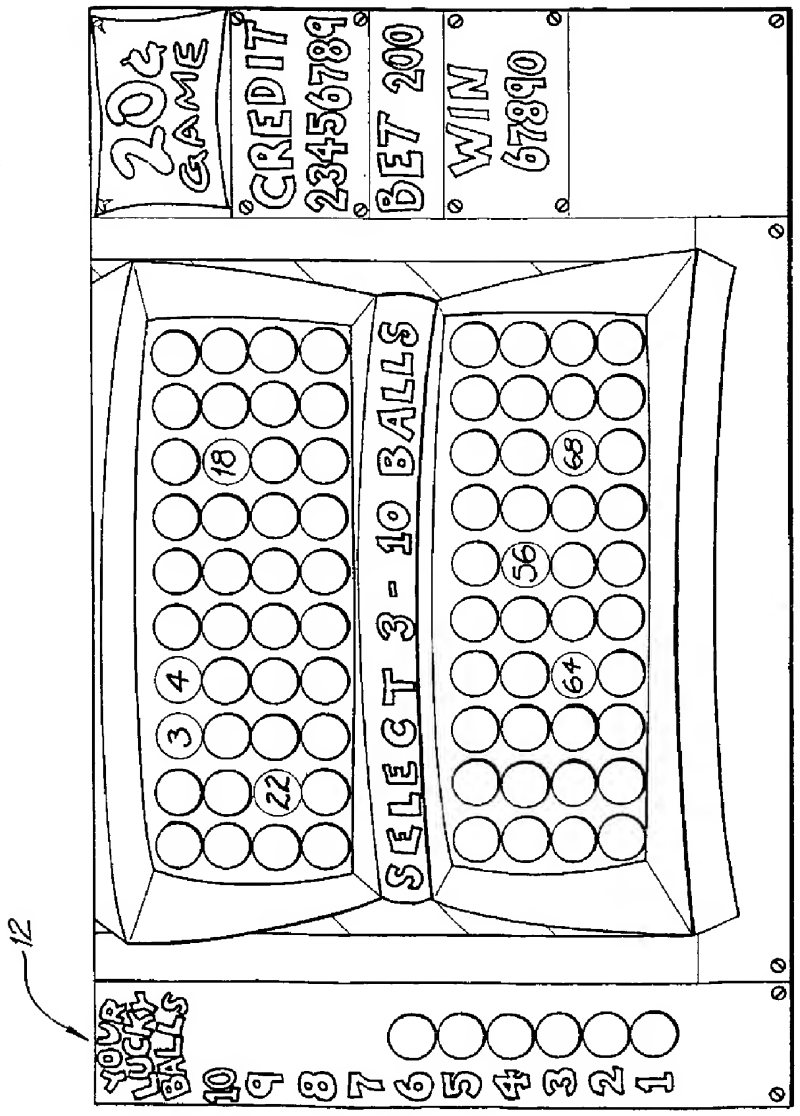


FIG. 1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4
3
22
68
56
64
YOUR LUCKY BALLS
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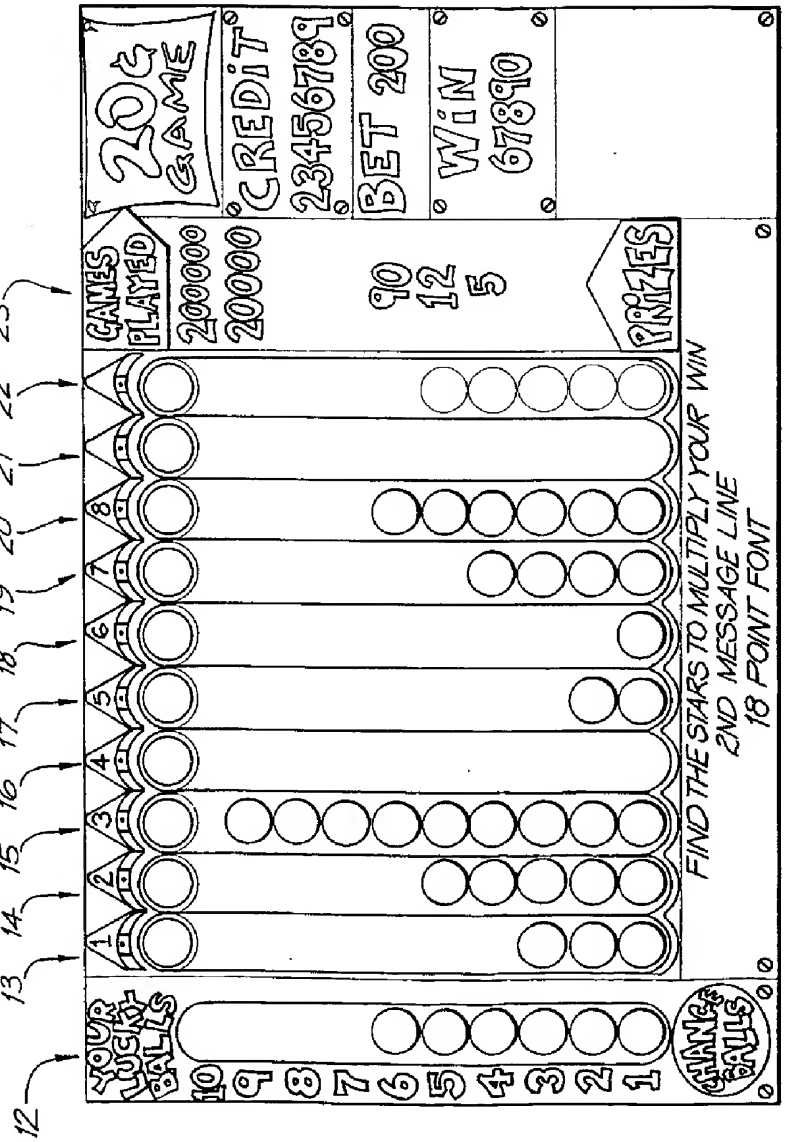
12

FIG. 2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12
5
PRIZES
FIND THE STARS TO MULTIPLY YOUR WIN
2ND MESSAGE LINE
18 POINT FONT
YOUR LUCKY BALLS
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LUCKY BALLS
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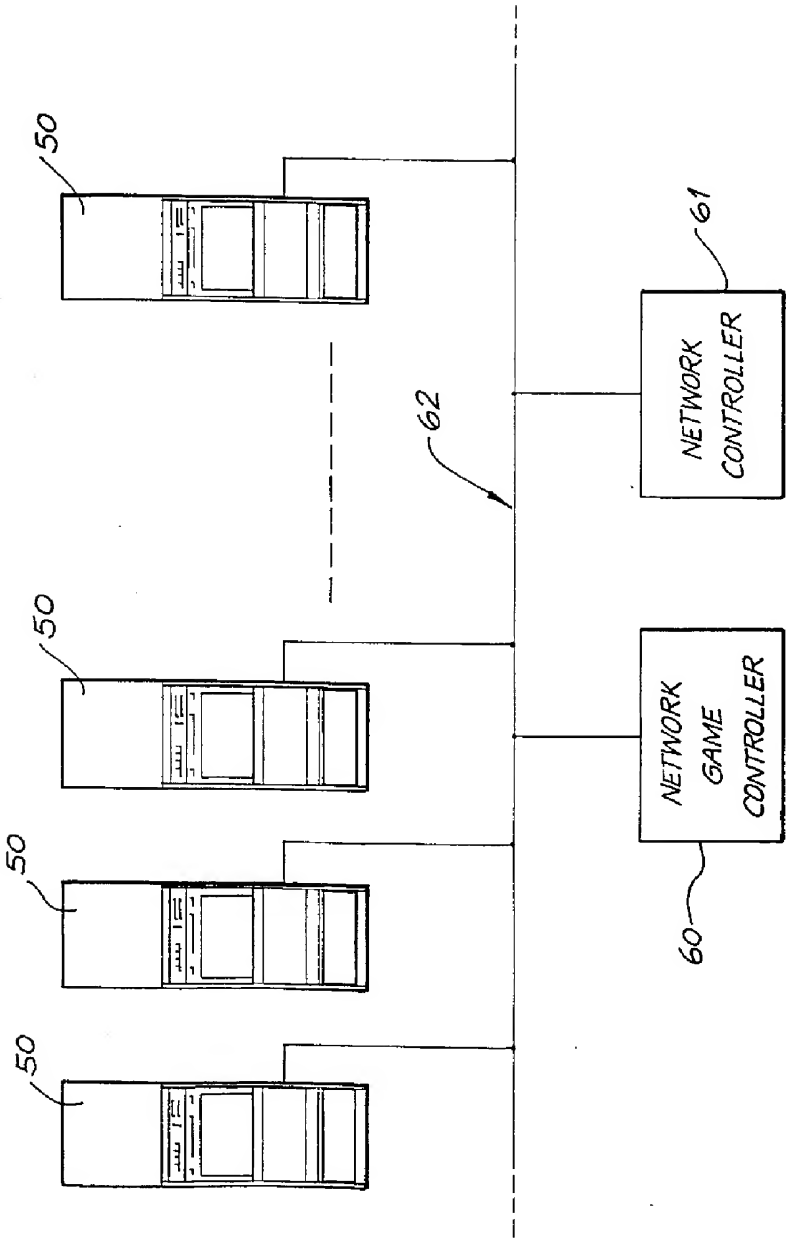
12 13 14 15 16 17 18 19 20 21 22 23

FIG. 3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50
50
50
61
NETWORK CONTROLLER
62
NETWORK GAME CONTROLLER
60

FIG. 4

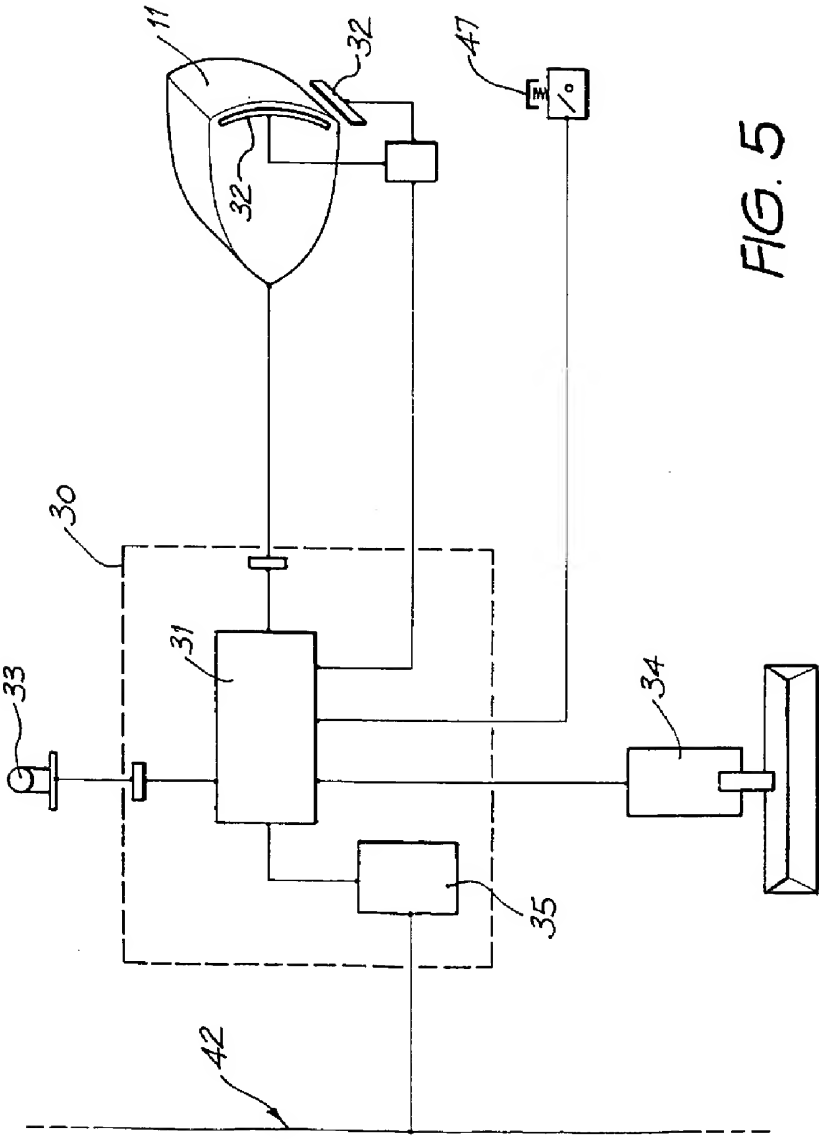
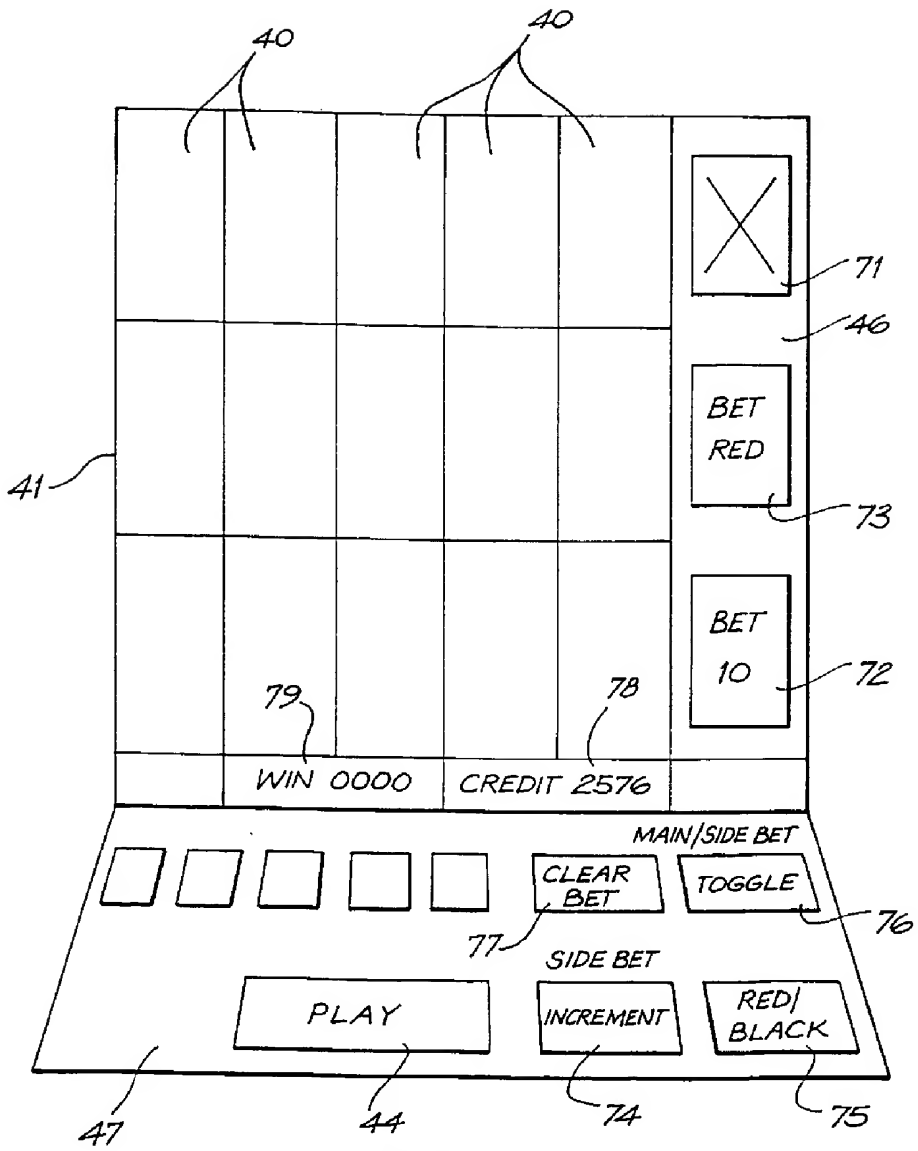


FIG. 5


40
40
71
46
BET
RED
73
41
BET
10
72
79
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TOGGLE
76
77
SIDE BET
PLAY
INCREMENT
RED/
BLACK
47
44
74
75

FIG. 6